## REMARKS/ARGUMENTS

Claim 1 has been amended in a non-limiting manner to better conform to U.S. practice.

Claims 1, 3, 4, 6, 7 and 10-21 are pending in the application, although claims 11-16 have been withdrawn from consideration. Applicants currently intend to seek rejoinder as appropriate upon indication of allowable subject matter.

The Office Action rejected claims 1, 3, 4, 6, 7, 10 and 17-21 under 35 U.S.C. § 103 as obvious over JP 06-240392 ("JP 392") in view of U.S. patent 3,980,473 ("Costin"). In view of the following comments, Applicants respectfully request reconsideration and withdrawal of this rejection.

In the previous Office Action, the Office rejected the pending claims as obvious over <u>JP 392</u> in view of <u>JP 780</u>. The Office asserted that <u>JP 780</u> discloses a Co based alloy containing 0.1-0.4% titanium, and that it would have been obvious to add titanium to the alloy of <u>JP 392</u> as disclosed in <u>JP 780</u> "to improve the corrosion resistance and high temperature strength of the alloy..." (Office Action dated November 19, 2009, at page 3).

Applicants overcame the asserted obviousness rejection by submitting a Rule 132 declaration demonstrating that titanium concentration is critical in the present invention — the Rule 132 declaration demonstrated that alloys having only 0.4% titanium result in spinners with vastly inferior properties as compared to alloys having the required minimum of 0.5% titanium. Applicants also explained that <u>JP 780</u> teaches away from titanium concentrations greater than 0.4% because <u>JP 780</u> teaches, in par. [0021], that Ti exceeding 0.4% will have a bad influence on fluidity. The Office withdrew the rejection based on <u>JP 392</u> and <u>JP 780</u>.

Now, the Office has basically reiterated the same rejection, using <u>Costin</u> instead of <u>JP</u> <u>780</u>. The Office asserted that <u>Costin</u> discloses a Co based alloy containing 0.25-1.5% titanium, and that it would have been obvious to add titanium to the alloy of <u>JP 392</u> as disclosed in <u>Costin</u> "to improve the corrosion resistance and high temperature strength of the alloy..." (Office Action dated February 22, 2011, at page 3).

Further, in making the "new" obviousness rejection, the Office completely ignored the Rule 132 declaration which provides evidence of the criticality of titanium concentration: the Office asserted that the Rule 132 declaration is "moot in light of the new ground of rejections." (Office Action dated February 22, 2011, at page 3).

Applicants respectfully submit that the Office's assertion of the new obviousness rejection, and the Office's refusal to consider the Rule 132 declaration, are improper. For the same reasons the pending claims are not obvious over <u>JP 392</u> and <u>JP 780</u>, the pending claims are also not obvious over <u>JP 392</u> and <u>Costin</u>, particularly in view of the evidence submitted in the Rule 132 declaration.

More specifically, in the Rule 132 declaration, Applicants demonstrated the criticality of titanium concentration with respect to the claimed invention -- 0.5% titanium and 0.4% titanium concentrations yield spinners having vastly different useful lives. This difference is significant, and demonstrates the inventiveness of the present invention.

Claim 1 requires at least 0.5% titanium. This amount of titanium has been optimized, and yields spinners having vastly improved useful lives. To establish a *prima facie* case of obviousness with optimization of a range, "the prior art must recognize the variable as a result effective variable that can be optimized." See M.P.E.P. § 2144.05 II A. However, none of the cited reference provide any suggestion that titanium concentration is a result effective variable that can be optimized. Stated another way, <u>Costin</u> teaches that no difference exists

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between 0.5% titanium and 0.4% titanium, so it cannot teach or suggest to one of ordinary

skill in the art that titanium concentration is a result effective variable. It was not until the

present application that this invention was placed into the hands of the public (as evidenced

by the Rule 132 declaration).

In fact, considering the art of record as a whole (which the Office must do), it is clear

that one of ordinary skill in the art would not have been led to optimize titanium in manner

required by the pending claims. JP 780, a reference relevant enough for the Office to base a

rejection upon, teaches away from such high titanium concentrations, expressly stating that

the upper limit is 0.4% titanium. Given this express teaching to the contrary, the asserted art

as a whole could not lead one of ordinary skill in the art to the claimed invention.

In view of the above, Applicants respectfully request reconsideration and withdrawal

of the rejection under 35 U.S.C. § 103.

Applicants believe that the present application is in condition for allowance. Prompt

and favorable consideration is earnestly solicited.

Respectfully submitted,

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## **RELATED CASE STATUS UPDATE**

Application No: 10/580,839

Reexam Control No:

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| Application No | Reexam<br>Control No | PTO Action Description | PTO Mail Date | Applicant Action Description | Date Filed  |
|----------------|----------------------|------------------------|---------------|------------------------------|-------------|
| 11/843,949     |                      | Final Rejection        | Jul-14-2010   | RCE Filed                    | Nov-15-2010 |
| 11/843,949     |                      | Final Rejection        | Jul-14-2010   | Final Resp                   | Oct-14-2010 |